

Application No. 09/740,513
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Group Art Unit 1725

ABSTRACT

B3 An injection molding machine for low-melting point metallic material has an injection mechanism having a tip portion, a melting cylinder and a rear portion holding a drive mechanism. The tip portion has a weighing chamber and a nozzle member feeding a mold. The melting cylinder is held at an oblique angle to promote gravity flow of the molten metal toward the tip portion. The melting cylinder encloses an agitating and injection mechanism that rotates and advances or retreats freely within the cylinder. One agitating and injection mechanism has a hollow shaft surrounding an injection rod tipped by an injection plunger that moves lengthwise in the shaft and agitating wings disposed around the tip end of the hollow shaft. The wings reach the inner sides of the cylinder and rotate. The plunger may extend beyond the shaft to be inserted in the weighing chamber.
